

Applicant : Donald X. Smith II
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24. The method of claim 1 wherein the metadata identifies a type of content selected from a set of content including: images, text and advertisement.

REMARKS

Claim Rejections – 35 USC §112

In the Office Action, the Examiner rejects Claims 1, 2 and 4 under 35 USC §112.

Specifically, the Examiner asserted:

Claim 1 recites the step of “if the print content is not assigned the [sic] priority level, printing the print content using a normal print mode.” However claim 2 further recites “each section of the print content is assigned a priority level.” Obviously, claim 2 is contradictory to claim 1. Furthermore, claim 4 recites the step of “printing a second section of print content that comprises a high level of priority by printing the second section in the normal mode.” Again, claim 4 is contradicting claim 1...

Applicant has amended the claims to: (1) further clarify the relationship between dependent claims 3 and 4 and independent claim 1; and (2) further clarify the claimed subject matter as requested by the Examiner in our aforementioned teleconference.

Claim Rejections – 35 USC §103

The Examiner rejects Claims 1-9, 11-17, and 19-23 under 35 USC §103 as being unpatentable over Schwarz, Jr. (US 6,476,927 B1) in view of Mantell (US 6,189,993 B1) (hereinafter “Schwarz” and “Mantell,” respectively). Specifically, the examiner asserts:

Schwarz, Jr. discloses the claimed invention except for reciting the print content is assigned different levels of priority and different print modes are associated with the priority levels; a low priority level is in grayscale and a high level of priority is in the normal print mode... Mantell teaches in Figures 4 and 5 that the print content is assigned

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different levels of priority (Figure 4) and different print modes (92) are associated with the priority levels (Figure 4); a low priority level is in grayscale (94) and a high level of priority is in the normal print mode (96).

While the Applicant appreciates the Examiner pointing out certain aspects of these potential references, we must respectfully submit that these references alone or in combination do not teach or suggest any aspect of the present invention. The Applicant's careful review of these cases indicates that they discuss entirely different problems than the one discussed by the present invention and therefore the solutions they suggest are also unrelated.

As amended, Claim 1 of the present invention recites:

1. (Twice Amended) A method for rationing ink in a printer, the printer having an ink supply for printing content on print media, the method comprising the steps of:

receiving a print job comprising one or more sections of print content identified by metadata in which one or more of the sections of print content are assigned priority levels according to the metadata;

parsing the metadata associated with the one or more sections of print content prior to printing the print job;

if a section of print content is assigned a priority level, printing the section of print content in a print mode that is appropriate for the priority level; and

if a section of print content is not assigned a priority level, printing the section of print content using a normal print mode.

In contrast, the Schwarz reference, entitled "Job Token Printer Assignment System," describes a method and apparatus for reducing the network overhead associated with transmitting print jobs to printers. The Mantell reference, entitled "Ink Jet Printer Having

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Multiple Level Grayscale Printing,” describes an apparatus for depositing accurate quantities of ink in a pixel location by varying the speed of the printhead assembly. Even combining these references, the result would only be a system which prints at a particular grayscale level. Neither reference teaches or suggests aspects of the present invention as recited in Claim 1.

Further, the Examiner asserts that:

“[i]t would have been further obvious to one having ordinary skill in the art at the time the invention was made to have the print content assigned different levels of priority and different print modes are [sic] associated with the priority levels; a low level is in grayscale and a high level of priority is in the normal print mode, as taught by Mantell, for the purpose of printing images having different grayscales.

Applicant respectfully submits that there is no suggestion in either reference of “the print content assigned different levels of priority and different print modes are [sic] associated with the priority levels;” or “a low level is in grayscale and a high level of priority is in the normal print mode” as asserted.

Instead, Schwarz relates to a job token printer assignment system to control the information flow and scheduling of printed documents (Schwarz, Col., lines 7-10). Schwarz addresses the problem that a conventional print job distribution system requires that the print job, which may be quite large, be carried twice across the system network multiple times (Schwarz, Col. 1, lines 13-25).

The Examiner sites Column 4, lines 54 and 55 of Schwarz as reciting the step of “parsing” described in the second step of Claim 1. However, the “parsing” in Schwarz is used to determine the appropriate printer to print on according to a job ticket token. Unfortunately, parsing in Schwarz does not cover all aspects of parsing data and, for example, does not teach or suggest the “parsing the metadata associated with the one or more sections of print content prior to printing the print job” as recited in Claim 1 of the present invention. Clearly, Figures 1, 8, and 9 of Schwarz, relied on by the Examiner, only describes a method and apparatus for reducing the

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resource overhead associated with sending print jobs across a network and does not teach or suggest the invention as presently claimed.

Likewise, Mantell describes a method and apparatus for printing images having different grayscales through control of printhead carriage velocity and the number of drops deposited per pixel (Mantell, Col. 1, lines 16-20). Mantell simply teaches a method for producing different grayscale levels for an entire print job (Mantell, Figure 5). Contrary to the Examiner's assertion, Mantell does not describe "that the print content is assigned different levels of priority" (Examiner's Office Action, pg. 3, lines 15-16). None of the components in Figure 4 of Mantell or the features in Figure 5 support this point. In fact, Figure 5 provides a facility for individually selecting print quality as draft, normal, high quality and deluxe quality and media type as plain, coated, glossy high resolution, glossy deluxe resolution. These options are clearly concerned with the amount of ink being used to print and the type of paper being used but nothing about priority.

The Examiner further states that Claims 10 and 18 are also unpatentable over Schwarz in view of Mantell as applied to claims 1-9, 11-17, and 19-23 above. For at least the same reasons provided above, Schwarz and Mantell independently or in combination do not teach or suggest as aspect of the invention as recited in these claims. Furthermore, Schwarz and Mantell are also inapposite for Independent Claims 7, 13, 14, 17, 19, and 21. For example, the cited references fail to disclose or suggest:

- A printing device having "a controller, coupled to the printing device, that controls the printing device in response to the print job, the controller having means for instructing the printing device to print in an ink-rationing mode in response to the ink supply level," as recited in Claim 7;
- A printer "having a capability to ration its ink supply level, the printer comprising comprising: a printing device that prints a received print job on print media, the print job having sections of content each section comprising a priority," as recited in Claim 13;

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- A method for generating a print document comprising “assigning a print priority level to each section of the at least one section of the content,” as recited in Claim 14;
- A method of “parsing the print content prior to printing; if the print content is assigned a priority level, printing the print content in a print mode that is appropriate for the priority level; and if the print content is not assigned the priority level, printing the print content using a normal print mode” as recited in Claim 17;
- A printer “that prints a received print job on print media, the print job having sections of content each section comprising a print priority level” as described in Claim 19; or
- A system for “receiving a print job comprising print content, the content having at least one section; parsing the print content to determine at least one print priority level for each section of the at least one section,” as described in Claim 21.

The Examiner relies on Grune et al (US 6,209,995 B1) in rejecting Claims 10 and 18. While Applicant acknowledges the Examiner’s rejection of Claim 10 and Claim 18 in view of Grune, both these dependent claims remain patentable based upon their dependence on Claim 7 and Claim 17 for at least the reasons previously described above. Likewise, Claims 2-6, 8-12, 15, 16, 18, 20, 22, and 23 remain patentable based upon their dependence on Claims 1, 7, 13, 14, 17, 19 and 21.

In summary, the Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Leland Wiesner, Applicants' Attorney at (650) 853-1113 so that such issues may be resolved as expeditiously as possible.

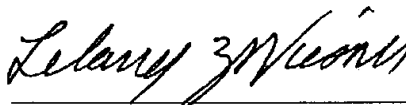
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For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

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Date



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Clean Copy of Claims as Filed

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receiving a print job comprising one or more sections of print content identified by metadata in which one or more of the sections of print content are assigned priority levels according to the metadata;